

We Claim:

1. A golf ball comprising:
 - a core;
 - an inner cover layer disposed on the core, the inner cover layer having a Shore D hardness of at least 60, and
- 5 an outer cover layer disposed on the inner cover layer, the outer cover layer having a Shore D hardness of less than 53,
 - wherein the outer cover layer comprises a reaction-injection-molded polyurethane.
2. The golf ball of claim 1, wherein the golf ball exhibits a PGA compression of 100 or less and a coefficient of restitution of at least 0.750.
3. The golf ball according to claim 1, wherein the outer cover layer has a Shore D hardness of less than 50.
4. The golf ball according to claim 3, wherein the golf ball has a PGA compression of less than 90.
5. The golf ball according to claim 1, wherein the inner cover layer comprises a thermoplastic material.
6. The golf ball according to claim 1, wherein the inner cover layer comprises an ionomer resin.
7. The golf ball according to claim 1, wherein the inner cover layer has a Shore D hardness of at least 65.
8. The golf ball according to claim 1, wherein the inner cover layer has a Shore D hardness of from about 60 to about 85.

9. The golf ball according to claim 1, wherein the outer cover layer has a Shore D hardness of from about 30 to about 50.

10. The golf ball according to claim 1, wherein the inner cover layer comprises at least one member selected from the group consisting of polycarbonates, reaction-injection-molded polyurethanes, styrene-butadiene elastomers and combinations thereof.

11. The golf ball according to claim 1, wherein the inner cover layer has a thickness of from about 0.01 to about 0.15 inches.

12. The golf ball according to claim 1, wherein the outer cover layer has a thickness of from about 0.01 to about 0.15 inches.

13. The golf ball according to claim 1, wherein the outer cover layer has a thickness of 0.03 inches to 0.07 inches.

14. The golf ball according to claim 1, wherein the core is selected from the group consisting of a solid core and a liquid filled core.

15. A golf ball comprising:
a core,
a first inner cover layer formed about said core,
a second inner cover layer formed about said first inner cover
5 layer, said second inner cover layer including at least 50 weight percent of at
least one material selected from the group consisting of ionomer resins,
polycarbonates, reaction-injection-molded polyurethanes, styrene-butadiene
elastomers and combinations thereof, and
an outer cover layer formed over the second inner cover layer, the
10 outer cover layer comprising a reaction-injection-molded polyurethane and
having a Shore D hardness of no more than 53, the golf ball having a PGA
compression of 100 or less and a coefficient of restitution of at least 0.750.

16. The golf ball according to claim 15, wherein the inner cover material is thermoplastic.

17. The golf ball according to claim 15, wherein the inner cover material is a thermoset.

18. The golf ball according to claim 15, wherein the inner cover layer comprises a styrene-butadiene elastomer.

19. A method of forming a golf ball, said method comprising:
5 providing a core;
positioning said core in a molding chamber adapted for forming golf balls or intermediates thereof;
forming an inner cover layer about said core; and,
forming an outer cover layer on said mantle layer via a reaction injection molding technique utilizing at least one polyurethane to thereby form said golf ball.

20. The golf ball produced by the method of claim 19.